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# Introduction

Pollution is probably the most important problem in the world today. One of the reasons it is so important to human beings is that we know that we brought about pollution. Unlike most of the other problems in the world, such as AIDS, pollution is a human creation. Since the beginning of time, whenever human beings changed their environment, they were greatly affected. Areas where pollution is extremely high encounter death rates and disease rates that are sometimes 15 or 20 times more than areas without pollution. Greedy corporations are pushing these problems to areas not ready to encounter this high level of pollution, and if something isn’t done soon to curtail these problems, we will all surely feel the longstanding effects they bring.

During the 1960’s, which I call the “Throwaway” era, Plastics and Styrofoam[[1]](#footnote-1) were thrown away without a care, and now we are finally seeing what that kind of stupidity can cause. At first, children began to understand the drastic changes that the entire world was facing. The planet was changing, and adults were doing nothing to save it. Yet, the polluted planet was being handed to the younger generations, who, while more educated on the topic, were not sufficiently knowledgeable to control earth’s problems. Nowadays, children are leading the environmental revolution. More educated and smarter on the issues that the world is facing, children are changing the planet. Still, all the education in the world cannot counter the pressure that Big Business is putting on the globe. Chemicals, human wastes, toxic wastes, and other kinds of pollution are beyond repair in some cases. Corporations do not care about the planet; they are willing to trade off small environmental risks for jobs and success in individual communities. Of course, most people in those communities don’t realize that them taking a job with these companies is detrimental to their survival.

Whenever I think of pollution’s effect on the world, I think of its effect on innocent human beings. When someone becomes sick or dies of some kind of sickness brought about by pollution, their human rights come into question. I think human rights, although usually reserved for genocide or other acts of evil, can encompass pollution as well. Our human right is simply the right we have to live our lives as we please, to live our lives without being hurt or affected unless we want to, and the basic needs we as human beings have. Pollution brought about by other people on us is not our choice. Therefore, whenever an area where humans live is polluted, it is a violation of that person’s human rights.

Nowadays, in an age where people are starting to fight back against corruption, the average Joe is winning the battle with Big Business. Pollution is being taken on with a vengeance, and people are beginning to notice how nice it is to rid the place they live in of pollution. Laws are being passed day in and day out in order to help the average person in their battle with pollution.

In order to talk about the problems we face today, we must go back hundreds of years to take a look at the effects pollution had on human beings in the past. The Industrial Revolution in both America and Europe let factories pollute the air without regulation. Because of that, the air pollution in certain areas of the world is causing death to this day. Certain cities in the Northeast United States have air that sometimes has 5 or 10 times more soot in it than the International Standard. The English “Black Country” is aptly named that because of the color of the air. For years, people there have lived in an area with the lowest quality of life in Western Europe. “The average live expectancy in “Black Country”, England, is 10 years less than the rest of the country.”[[2]](#footnote-2) The reason not much has been done to change that is because it has been that way for more than 100 years. One of the problems with pollution is that if it becomes common, then people stop caring.   
Another problem stemming from years ago is waste disposal. For many years, human waste was just let out into rivers and streams, spreading disease and sickness. A prime example of that is London, England. “By the 1850’s, the Thames River was so polluted that it was portrayed in cartoons with Death rowing along it.”[[3]](#footnote-3) A public outcry then prompted the city to develop a proper sewage system, but years of damage had been done, and the river is still not clean to this day. Another problem dealing with waste disposal is the fact that human waste is still dumped into rivers, lakes, and oceans without the proper treatment. Although the oceans aren’t greatly affected by a small amount of waste, over time it could definitely begin to hurt human interests in them, such as the fishing industry. In rivers and lakes though, there is usually no way for the waste to find its way out of the water. Because of the water systems we use on earth, this could be highly dangerous. “Using dirty water can make everyday activities like washing clothes and bathing dangerous, due to the infection that lies within the bacteria that live on human waste.” (Johnstone, 9) If people continue to use dirty water, that disease will spread to unimaginable levels.

# Air pollution

Pollution itself is a very broad category, and there are many different kinds of pollution. One of those **is air pollution.** Air pollution is probably the longest lasting type of pollution there is. Because of the Industrial Revolution, factories spewed out smoke and chemicals that had never been in contact with human lungs before. To this day the same problem remains. Air pollution, although regulated, cannot be contained in many cases. In certain areas of the world, air pollution is out of control.

Air pollution occurs when wastes dirty the make the air dirty. People produce most of the waste that cause air pollution. Such waste can be in the form of gases or be particulates (particles of solid or liquid manner). These substance result chiefly from burning fuel to power motor vehicles and to heat buildings. industrial processes and the burning of garbage also contribute to air pollution. Natural pollutants include ,pollen,soil particulates, dust, and naturally occuring gases. Also more causes of air pollution are forms of transportation such as automobiles,airplanes,ships, and trains.

It is the immediate effect of air pollution on urban atmospheres that is most noticeable and causes the strongest public reaction. The city of Los Angeles has been noted for both the extent of its air pollution and the actions undertaken for control. Los Angeles lies in a coastal plain, surrounded by mountains that restrict the inward sweep of air and that separate a desert from the coastal climate. Fog moving in from the ocean is normal to the city. Temperature inversions characterized by the establishment of a layer of warm air on top of a layer of cooler air prevent the air near the ground from rising.

Air Pollution has a negative impact on water quality. For the past 30 years, scientists have collected a considerable amount of convincing information demonstrating that air pollutants can be deposited on land and water, sometimes at great distances from their original sources, and can be an important contributor to declining water quality. These air pollutants can have undesirable health and environmental impacts, such as contaminated fish, harmful algal blooms, and unsafe drinking water. Researchers had found the sources of these air pollutants. They have worked diligently to improve the environment.

Factory and business owners have the ability to prevent air pollution. The government should take action, requiring equipment to cut down on hydrocarbons in the atmosphere. The little spent regulating equipment used in factories can go a long way saving billions on health problems and other related issues. Background Over 150 million people in the United States live in areas where the Environmental Protection Agency considers the air to be unhealthy. Air pollution is the presence in the atmosphere of harmful gases, liquids, or solids. Smog has been a problem in coal-burning areas for several centuries

## Deforestation

**At the present rate of tropical deforestation, the world's remaining tropical rainforests will vanish in just 30 years**[[4]](#footnote-4)****.****

Deforestation in the tropical areas of the world is following a course similar to the earlier clearing of the forests in Europe and North America, only advancing more rapidly.

Since just 1950, the world's population has more than doubled to more than 6 billion people, with the fastest population growth being in the tropics. Today, more than 3 billion people live in the tropics alone, more than lived in the entire world in 1950. To provide food, wood, fuel and resources for the world's rapidly growing population, and to make room for the exploding tropical population, the world's tropical rainforests are literally disappearing.

Even with tropical deforestation at an all-time high, tropical hardwood prices continue to climb as world demand for tropical hardwoods continues to grow. A single teak log for example can now bring as much as $20,000. Annual world consumption of tropical hardwoods is now more than 250 million cubic meters, or over 100 billion board feet, per year.

Southeast Asia until recently has been the largest source of supply for tropical hardwoods, but that area will largely be depleted within the next five years. All of the primary forests in India, Sri Lanka, and Bangladesh are gone. Ivory Coast's forests are essentially non-existent. Nigeria's forests have been decimated as well. As Asia's and Africa's tropical forests are depleted, consuming countries are turning increasing attention to Latin America and the Amazon, whose own rapidly growing population is also a source of pressure on the rainforests. Also, trillions of dollars worth of oil, gas, uranium, gold, iron, bauxite and other minerals, and millions of acres of potential farm land, lie under the Amazon, the largest area of rainforest remaining on Earth.

Amazon rainforests are being cleared on a vast scale for settlements, logging, gold mining, petroleum, cattle ranching, sugar cane (for gasohol), large hydro dams, and charcoal for smelting ore. Peasant farmers also clear the rainforest to have land for planting, by cutting the forest, and then in the dry season burning what they have cut.

During one month in 1995 for example, NASA satellite surveys of Brazil recorded 39,889 individual fires, *up 370 percent* from the same month of the prior year. In neighboring Bolivia the smoke is sometimes so thick that schools have to close and flights have to be delayed or canceled.

Scientists estimate that until as recently as 10,000 years ago, the world had 6 billion acres of tropical rainforests. By 1950, we had a little less than 2.8 billion acres of rainforest. It was then being cut down at the rate of about 10 to 15 million acres per year. Today we have less than 1.5 billion acres left, and we are clearing this remaining rainforest at the rate of 30 to 50 million acres per year, two to three times as rapidly as just a few decades ago.

If the present rate of tropical deforestation continues, there will be nearly *no tropical rainforests left* in just 30 years. Instead of holding steady however, the rate of deforestation is actually predicted to *increase even further*.

Scientists project that the rate of tropical deforestation will continue to increase for the next 10 to 15 years until there simply will not be enough forest left to sustain the rate of cutting.

The chart (see appendix #1) dramatically illustrates the fate of the world's rainforests.  
     As the world's population increases, and therefore the competition for land, food and resources also increase, it appears that the world's rainforests will continue to fall at an increasingly accelerating rate. The newest data dramatically confirms that:

* tropical deforestation is a very serious and growing problem. Scientists may disagree on the details, but they all agree that the implications for mankind are huge - in terms of possible global warming, increasing desertification (the world's deserts are now growing 27,000 square miles per year), and loss of biodiversity, to name a few
* we must do everything reasonable we can to protect the world's remaining rainforests
* one important way to help is to plant tropical hardwood trees for harvests, to produce tropical hardwoods that aren't taken from the natural rainforest
* as individuals, we may at times feel insignificant, but by working together, we can indeed make a difference
* and by being an example for others, we can multiply the result

The latest statistics also dramatically underscore the benefits of planting tropical hardwood plantations:

* as the world's population continues to increase in numbers and prosperity, the demand for beautiful tropical hardwoods will continue to grow rapidly
* as country after country in the tropics depletes its own supply of tropical forest and passes from being an exporter of tropical hardwoods to having to import wood to fulfill its domestic needs, international demand for tropical hardwoods will continue to grow dramatically
* as the world loses more and more rainforest, there will be a rising imperative to protect the small amount of rainforest remaining
* as international demand for tropical hardwoods increases and the availability of the natural rainforests as a source of supply of these hardwoods decreases, both because of continued harvesting and because the dwindling remaining forests will be increasingly protected, the prices of all tropical hardwoods will likely soar
* there is substantial opportunity in planting nearly any species of tropical hardwoods - and even more opportunity in planting tropical hardwoods that are sought after for their beauty or unique properties.

## Acid rain

**A further result of air pollution is acid rain**. Acid rain basically appears when factories release high levels of sulfur into the air. The sulfur then combines with rainwater to form a weak sulfuric acid. Acid rain itself cannot harm humans, but it can harm our environment and our quality of life. Over time, the acid rain will kill plants, weaken structures and homes used by humans, and can even kill life in entire lakes and rivers. And since studies have yet to be completely conclusive, nobody knows how it affects us physically in the long run. One of the reasons it is such a threat is because it travels in the air and may fall on areas that did not produce it. Since acid rain can be prevented by government regulation, stopping the release of sulfur into the air is a definite first step to curbing acid rain.

In early 1974, scientists warned governments across the globe that the release of certain industrial chemicals, such as CFCs and Halons, could result in a thinning of our ozone layer. The ozone layer is a part of our atmosphere that prevents most Ultraviolet rays from entering the earth’s surface layer. It allows only enough high-energy radiation to enter so that Vitamin D in humans can become active. Too much radiation, and certain human mutations begin to occur. In 1985, a hole in the ozone layer was discovered over Antarctica. Over the past 10 years, more and more holes were discovered over different parts of the world. Since then, skin cancer rates have skyrocketed, as well as levels of radiation among human beings. “Almost 4% of the world population will encounter some type of skin cancer within the next five years.”[[5]](#footnote-5) Contrary to popular belief, skin cancer can be deadly if not treated properly. All of these problems stem from air pollution created by factories and plants. If we can reduce air pollution, the air may be clean within the next 100 or 150 years.

# The “Green House Effect”

The greenhouse effect is a benign feature of the ecosystem . Certain gases in the atmosphere, such as CO2, CH4 , N2O, O3, CFC, allow the sunlight reach the earth but prevent the heat from escaping and thus the temperature of the earth remains stable. These five different gases have different influence on the "greenhouse." If CO2 can have twice as much effect, then CH4 can have ten times as much, N2O a hundred times and CFC ten thousand times. Besides, the steam of water can also lead to the greenhouse effect. The sensitivity of the climatic system to greenhouse gases is such that the equivalent of a doubling of CO2 could ultimately increase the average global temperature by somewhere between 1°C and 5°C.

But nowadays the greenhouse gases absorb sunlight and infrared radiation which produces heat and it increases continuously. In principle, the temperature of the earth also increases. And this is so-called "Green House Effect".

At present, the concentration of carbon dioxide doubles that before the Industrial Revolution . And the global temperature has increased about 1.5~3.5¢J. Human beings have altered the composition of the atmosphere. Coal-burning factories and motorcycles release more carbon dioxide into the atmosphere than oceans and forests can absorb. Consequently, the carbon dioxide content of the atmosphere could double the present level within the next fifty years.

People may ask: "Is it a serious problem? " My answer is: "Yes!" The global warming can effect us in many aspects, first of all, the level of the oceans has risen. A rise of sea level may accompany global warming, possibly in the range of 0 to 60 cm. The part of some land will be covered. Strictly speaking, some islands may disappear quietly and without leaving a trace. In addition, the global warming causes crisis to the ecosystem and agriculture. Some animals and plants suffer a lot of difficulties due to the global warming. To sum up, the greenhouse effect not only affects human lives but also causes pecuniary loss.

The global warming affects our human daily lives. And we must find the strategies to decrease the effect, which are caused by global warming. Indeed, human being have caused a lot of harm to nature, but the final victims who will be badly hurt will also be humans themselves.

The centrally "planned" economies produce the most greenhouse gases per unit of economic output. The United States-with the largest transportation needs of any nation-produces approximately one-third, or 1.0 metric ton/$1,000 GNP, of the centrally planned output of CO2. All of the nations that produce less than the United States are smaller geographically. Japan, often cited for its efficiency, is second from the bottom of the table, but almost all its citizens live near each other, and the country is highly nuclear. France, the cleanest of all, is also the most nuclear and emits .34 metric ton of CO2/$1,000 GNP[[6]](#footnote-6).

# Water pollution

Water pollution occurs mostly when people overload the water environment with wastes. It’s defined as contamination of streams, lakes, underground water, bays or oceans by substances harmful to living things.

Water is necessary to life on earth. All organisms contain it, some drink it, some live in it. Plants and animals require water that is moderately pure, and they cannot survive if their water is loaded with toxic chemicals or harmful microorganisms. If severe, water pollution can kill large numbers of fish, birds, and other animals, in some cases killing all members of a species in an affected area.

Pollution makes streams, lakes, and coastal waters unpleasant to look at, to smell, and to swim in. Fish and shellfish harvested from polluted waters may be unsafe to eat. People who ingest polluted water can become ill and if they’re exposed for a long time, may develop cancers, or have children with birth defects.

There are two types of water pollution; point source and nonpoint source. Point sources of pollution occur when harmful substances are put directly into a body of water (such as an oil spill). A nonpoint source is when pollutants enter the water indirectly through environmental changes (like when fertilizer is carried into a stream by rain)

The major water pollutants are chemical, biological, and physical materials that lessen the water quality. Pollutants can be separated into eight different classes:

1. Petroleum Products - oil and chemicals from oil are used for fuel, lubrication, plastics manufacturing, and many other purposes. The petroleum products get into water by accidental spills from ships, tanker trucks, and leaky underground storage tanks. Many petroleum products are poisonous if ingested by animals and spilled oil damages the feathers of birds and the fur of animals, often causing death.
2. Pesticides and Herbicides - chemicals used to kill unwanted animals and plants may be carried into streams by rainwater. The chemicals in these that are not biodegradable can remain dangerous for a long time.

When an animal eats a plant that’s been treated with certain non-degradable chemicals, the chemicals are absorbed into the tissues or the organs of the animals. When other animals feed on a contaminated animal, the chemicals are passed up to them. As it goes up through the food chain, the chemical becomes more harmful, so animals at the top of the food chains may suffer cancers, reproductive problems, and death.

More than 14 million Americans drink water contaminated by pesticides, and the EPA estimates that ten percent of wells contain pesticides. Nitrates can cause a lethal form of anemia called blue baby syndrome in infants.

1. Heavy Metals - heavy metals, such as copper, lead, mercury, and selenium, get into the water from industries, automovile exhaust, mines, and natural soil. Heavy metals also become more harmful as they follow the food chain. When they reach high levels in the body, they can be immediately poisonous, or can result in long-term health problems. They can sometimes cause diarrhea and, over time, liver and kidney damage. Children exposed to lead in water can suffer mental retardation.
2. Hazardous Wastes - chemical wastes that are either toxic, reactive, corrosive, or ignitable. If not treated or stored properly, they can pollute water supplies. They can reach toxic levels when animals eat one another.
3. Excess Organic Matter - fertilizers and other nutrients used to promote plant growth on farms and in gardens may fine their way into water. At first the nutrients will help the plants and algae in the water grow, but when they die and settle underwater, microorganisms decompose them, while decomposing them the microorganisms take in oxygen that is dissolved in the water. The oxygen levels in the water may drop so low that fish and other oxygen-dependent animals in the water suffocate, and die.
4. Sediment - soil particles carried to a stream bed, lake, or ocean, if in large amounts, can also be a pollutant. Soil erosion can damage a stream or lake by adding too much nutrient matter. Sedimentation can also cover stream bed gravel where many fish lay their eggs.
5. Infectious Organisms - many disease causing organisms that are present in small numbers in most natural waters are considered pollutants when found in drinking water. These parasites can cause illness, especially in people who are very young or very old, and in people who are already suffering from other diseases.
6. Thermal Pollution - water is often taken from rivers, lakes, or the ocean to be used in factories and power plants. The water is usually returned to the source warmer than when it was taken. Even a small temperature change in a body of water can drive away the fish and other species that were originally there, and attract other species in place of them. Thermal pollution can speed up the biological processes in plants and animals or lower the oxygen level in the water. Fish and other wildlife near the discharge source, may die.

Another cause of pollution, pathogens (bacteria, viruses , and protozoan) can cause many illnesses from typhoid and dysentery to minor repiratory and skin diseases. They enter waterways through untreated sewage, storm drains, septic tanks, runoff from farms, and boats that dump sewage.

To help, we need to learn about ways for disposing harmful household wastes so they don’t end up in sewage treatment plants or landfills. In our yards, we should determine whether or not we need to add nutrients before fertilizers are applied, and look for alternatives where fertilizers may run off into surface waters. We need to preserve existing trees and plant new trees and shrubs to help prevent soil erosion. Around the house we should we need to keep litter, pet waste, leaves, and grass clippings out of gutters and storm drains, and buy as many heavily packaged foods, certain boxes, cartons, bottles, etc that are made with polluting dyes.

# Toxic waste pollution

**Another type of pollution** that is definitely a threat to human safety **is toxic waste pollution**. This type of contamination is caused when the byproducts of chemical reactions are basically just dumped anywhere the company that produced them so pleases. Although there are supposedly safe ways of disposing of these wastes, there is no natural way of ridding the planet of them. Therefore, most toxic waste is just left out to seep into water sources and into areas of human development. Usually, the outcome is very serious. Toxic waste dumpsites near Toms River, NJ have been under fire in recent years due to the unusually high cancer rates in that town. According to John Whitestone, since these toxic waste disposal sites have been abandoned, cancer among 12 to 16 year olds has almost quadrupled. (196) Serious diseases have become a huge debate on the issue of toxic waste disposal, and many people think there needs to be a safer way of disposing this kind of waste or that alternatives to the chemical processes that produce these chemicals need to be established.

**Further areas of environmental contamination are nuclear waste, nuclear disaster, and nuclear war**. All three of these are directly related to each other in that all can result in immediate death and death well after contamination. Nuclear wastes are the byproducts of nuclear reactions in power plants. There is a very safe way to dispose of nuclear waste, but it has been proven in the past that many of these techniques can be harmful to human beings if they are not properly completed. Nuclear waste contains high levels of radiation. Radiation, in levels of that height, can kill a person within hours. At lower levels, such as levels of radiation that someone would encounter over long periods of time, radiation can cause cancer and leukemia. Radiation is used advantageously in X-rays and cancer treatment, but it has not truly been proven if these tactics are actually safe, due to the short period of time of their use.

Nuclear disaster is just that: a disaster. This can occur at any nuclear power plant, and it is usually due to a system error in the plant’s computer. A nuclear disaster will release radioactive gas into the air, threatening the lives of the people living in that area. The most notable nuclear disaster occurred in Chernobyl, Ukraine, in April 1986. An error in the nuclear reactor’s core released radioactive gas into the air, immediately killing 30 people and raising the radiation levels of areas as far away as 31 miles to 148 times higher than normal. “Radiation released by this accident is expected to cause about 1000 deaths in Europe over the next 40 years.” (Whitestone, 320) Nuclear disaster can be avoided if a different energy source is found, but since nuclear energy is a big money maker, some companies are reluctant to research cheaper and safer ways to receive energy.

Nuclear weaponry is not necessarily a form of pollution, but it is definitely a wasteful, contaminating threat to our environment and well being. Nuclear weapons use the same type of energy as nuclear power plants, but that energy is used for mass destruction. Although many countries in the world have nuclear arsenals, only two atomic bombs have actually been dropped on human beings, both during World War II on Japanese soil. The first one was dropped on Hiroshima on August 6, 1945, the second on Nagasaki almost a month later. Obviously, these bombs were meant to kill people, but it is not clear if anyone knew the long-lasting effects of their damage.

One reason nuclear weapons are so useless is that their sheer power can be detrimental for years afterwards, and cannot bring peace, only death. “Besides the actual number of people killed by the immediate impact of the two atomic bombs, it is estimated that almost 100,000 people a year feel the effects of these bombs through cancer and other radiation-linked diseases.”[[7]](#footnote-7) Nuclear weaponry is just as damaging to advancement in human development as any other type of pollution.   
This paper should have made it obvious that human beings are directly responsible for violating their own human rights. Since most people have no say in the pollution that is silently killing them, there is no way for them to know how to change that. Only education and power taken from Big Business can result in a turnaround for the people of the world. If everyone becomes more involved in curbing pollution, one day we will live in a pollution free society. There are many ways to begin that. Children should learn more and more about recycling and pollution from an early age, and adults should learn how to prevent pollution in their community. Research needs to be done to come up with less dangerous ways of disposing of waste and even producing less waste in the first place. If alternatives to artificial processes are used, pollution may no longer be a problem in the future; we will live in a pollution free society, filled with healthy, happy people. Of course, if we keep polluting like this, then there may not be a future. Our rights as humans are simply that: our rights. If we keep polluting, then we will no longer have a choice in how healthy our lives are. These rights are ours to lose, and we have to push our governments to create laws that will enable us to keep those rights forever.

# Environmental movements

Environmental movement is a term used for any social or political movement directed towards the preservation, restoration, or enhancement of the natural environment. Most environmental movements have similar value systems and moral codes, although they often diverge in details such as emphasis, priorities, means of action, and specific goals. They often share the notion that the perception of one's environment is strongly connected with that of one's self. In this regard, some environmentalists distinguish themselves from conservationists. Environmental movements often interact or are linked with other social movements with similar moral view.

The earliest major environmental issue in New Zealand was the raising of Lake Manapouri[[8]](#footnote-8) for a hydro-electricity scheme. The campaign was successful in preventing the lake level from being raised. Other major issues were nuclear energy, preventing native forest logging on the West Coast and halting the growing of GE[[9]](#footnote-9) food crops.

In North America the early environmentalists encouraged emulation of indigenous peoples and enriching the natural ecology with slow patient effort. For example, Chapman, also known as “Johnny Appleseed” alone planted millions of apple trees throughout the United States. The movement had little or no explicit political character. It was mostly aesthetic. It had no central doctrine. Most of its proponents did not know each other, but created a powerful discourse that influenced people strongly at the time.

The Conservation movement was an American invention of John Audubon and others who invoked Christian reverence for the Creation to protect natural habitat from man in the 19th century. They lobbied consistently for parks and human exclusion from "the wild". They saw humans as apart from nature, in line with Judeo-Christian ethics of the time, and believed that an awe of biodiversity (as we call it today), would inspire religious piety.

By contrast with the Conservation movement, early enviromentalists did not lobby for parks or human exclusion from "the wild". They did not see humans as apart from nature.

The harshest critic of the environmental movement in the 20th century was probably Ayn Rand, who considered it to be the opponent of human morality, creativity and industry.

Largely due to the political critique and confusion, and a growing concern with the environmental health problems caused by pesticides, some serious biologists and ecologists created the scientific ecology movement which would not confuse empirical data with visions of a desirable future world.

Today it is the science of ecology, rather than any aesthetic goals, that provide the basis of unity to most environmentalists. All would accept some level of scientific input into decisions about biodiversity or forest use. Most would generally deny that there is such a thing as “enviromentalism” and consider that phrase an invention of enemies.

The environmental movement today persists in many smaller local groups, usually within ecoregions. Some resemble the U.S. conservation movement - whose modern expression is the Sierra Club, National Geographic Society and other American organizations with a worldwide influence.

These "politically neutral" groups tend to avoid global conflicts and view the settlement of inter-human conflict as separate from regard for nature - in direct contradiction to the ecology movement and peace movement which have increasingly close links: While Greenpeace, and other Green Parties for example, regard ecology, biodiversity and an end to non-human extinction as absolutely basic to peace, the local groups may not, and may see a high degree of global competition and conflict as justifiable if it lets them preserve their own local uniqueness.

There are different types of environmental organizations. Four of them, I want to mention in my paper. They are:

* Government Organizations
* Intergovernmental Organizations
* Private Organizations (Environmental NGO[[10]](#footnote-10))
* International Organizations

The government organizations are the government departments or agencies devoted to monitoring and protecting the environment. In Canada, the most known federal environmental agency is the Environment Canada. It is responsible for weather forecasting, managing and administration of National and conservation parks, water and forest protection and so on. The English Heritage is a United Kingdom government body with a broad remit of managing the historic environment of England. Its major responsibilities are the conservation, advising, registering and protecting the historic environment. The mission of the United States Environmental Protection Agency (EPA) is to protect human health and to safeguard the natural environment: water, air, land.

Intergovernmental organizations, such as the European Environment Agency, are devoted to establishing a monitoring network for monitoring the European environment.

The Environmental NGO include only social and cultural groups, whose primary goal is not commercial. These organizations are involved in lobbying, advocacy, or conservation efforts.

The international organizations, like Greenpeace, Green Cross International and Friends of Earth, use direct actions to stop the destruction of the natural environment. At this part I would like to describe the Greenpeace organization and its action.

Greenpeace is an independent, campaigning organization which uses non-violent, creative confrontation to expose global environmental problems, and to force solutions for a green and peaceful future. Greenpeace's goal is to ensure the ability of the earth to nurture life in all its diversity. Greenpeace has national and regional offices in 41 countries worldwide.

The origins of Greenpeace lie in the formation of the Don't Make A Wave Committee. Taking its name from a slogan used during protests against United States nuclear testing in late 1969, the Committee came together with the objective of stopping a second underground nuclear bomb test codnamed "Cannikin" by the United States military beneath the island of Amchitka, Alaska. In September 1971, a fishing vessel skippered by John Cormack. was named the Greenpeace, and set sail for the island of Amchitka with the intention of disrupting the scheduled second nuclear test. Upon their return to Alaska, the crew learned that protests had taken place in all major Canadian cities, and that the United States had postponed the second underground test until November. Although attempts to sail into the test zone using a second chartered vessel also failed, no further nuclear tests took place at Amchitka. Following Stowe's departure from the chairmanship of the Don't Make A Wave Committee, the fledgling environmental group officially changed its name to the "Greenpeace Foundation".

By the late 1970s, spurred by the global reach of what Robert Hunter called "mind bombs”, more than 20 groups across North America, Europe, New Zealand and Australia had adopted the name "Greenpeace".

In 1979, however, the original Vancouver-based Greenpeace Foundation had encountered financial difficulties, and disputes between offices over fundraising and organisational direction split the global movement. David McTaggart lobbied the Canadian Greenpeace Foundation to accept a new structure which would bring the scattered Greenpeace offices under the auspices of a single global organisation, and on October 14, 1979, Greenpeace International came into existence. Greenpeace's transformation from a loose international network — united by style more than by focus — to a global organisation able to apply the full force of its resources to a small number of environmental issues deemed of global significance.

In 1978, Greenpeace launched the Rainbow Warrior, a 40-metre, former fishing trawler named for the Creek legend that inspired early activist Robert Hunter on the first voyage to Amchitka. Greenpeace purchased the Rainbow Warrior (originally launched as the Sir William Hardy in 1955) at a cost of £40,000, and volunteers restored and refitted her over a period of four months.

The Rainbow Warrior would quickly become a mainstay of Greenpeace campaigns. Between 1978 to 1985, crew members also engaged in non-violent direct action against the ocean-dumping of toxic and radioactive waste, the Grey Seal hunt in the Orkneys and nuclear testing in the Pacific.

Greenpeace's continued protest against nuclear testing at Moruroa atoll prompted the government of France to order the bombing of the Rainbow Warrior, in Auckland, New Zealand, in 1985.

The Warrior had sailed from the North Pacific, where it assisted the evacuation of the inhabitants of Rongelap in the Marshall Islands, who continued to suffer health effects attributed to the fallout from American nuclear testing during the 1950s and 1960s.

The organization currently actively addresses many environmental issues, with primary focus on efforts to stop global warming and to preserve the biodiversity of the world's oceans and ancient forests. In addition to the more conventional environmental organization methods, such as lobbying politicians and attendance at international conferences, Greenpeace has a stated methodology of engaging in nonviolent direct action.

Greenpeace uses direct action to attract attention to particular environmental causes, whether by placing themselves between the whaler's harpoon and their prey, or by invading nuclear facilities dressed as barrels of radioactive waste.

Some of Greenpeace's most notable successes include the ending of atmospheric testing of nuclear weapons, a permanent moratorium on international commercial whaling, and the declaration by treaty of Antarctica as a global park, forbidding possession by individual nations or commercial interests. To back up this latter point, World Park Base was established in Antarctica.

Despite its founding in North America, Greenpeace achieved much more success in Europe, where it has more members and gets most of its money. The vast majority of Greenpeace's donations come from private individual members.

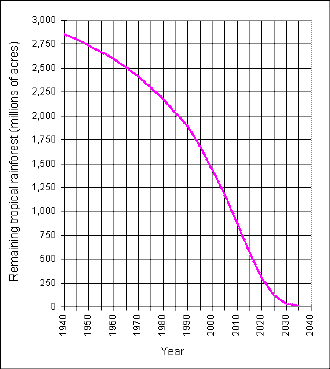
During its history, Greenpeace has weathered criticism from government and industry, and on occasion, from other environmental groups. While critics have often focused on undermining the scientific or factual basis of particular campaigns, the organisation's system of governance and its use of nonviolent direct action have also been sources of controversy.

# Conclusion

So, pollution is one of the most burning problems of nowadays. Now millions of chimneys, cars, buses, trucks all over the world exhaust fumes and harmful substances into the atmosphere. These poisoned substances pollute everything: air, land, water, birds and animals. So, it is usually hard to breathe in the large cities where there are lots of plants. Everything there is covered with soot and dirt. All these affect harmfully. Every year the atmosphere is polluted by about 1000 tons of industrial dust and other harmful substances. Big cities suffer from smog. Cars with their engine have become the main source of pollution in industrial countries. Vast forests are being cut down for the need of industries in Europe and USA. The loss of the forests upsets the oxygen balance of the new wastelands. As the result some species of animals, birds, fish and plants have disappeared and keep disappearing. To slow down the rate of pollution many environmental organizations engage in nonviolent actions. But it is surely not enough to stop the processes that have already began in nature, and that had been caused by the way we all live. To protect our environment we all should care and do everything possible to save the nature for our kids.

# Appendix

## #1. Rates of deforestation



## #2. Carbon Dioxide Emissions per Units of Economic Output

|  |  |  |  |
| --- | --- | --- | --- |
| Country | Emissions (metric tons CO2/year | GNP (billions of $/year) | Emissions/GNP Ratio (metric tons CO2/year) |
| China | 2,236.3 | 372.3a | 6.01b |
| South Africa | 284.2 | 79.0 | 3.60 |
| Romania | 220.7 | 79.8a | 2.77b |
| Poland | 459.4 | 172.4 | 2.66 |
| India | 600.6 | 237.9 | 2.52 |
| East Germany | 327.4 | 159.5a | 2.05a |
| Czechoslovakia | 233.6 | 123.2a | 1.90b |
| Mexico | 306.9 | 176.7 | 1.74 |
| U.S.S.R. | 3,982.0 | 2,659.5a | 1.50b |
| South Korea | 204.6 | 171.3 | 1.19 |
| Canada | 437.8 | 435.9 | 1.00 |
| United States | 4,804.1 | 4,880.1 | .98 |
| Australia | 241.3 | 246.0 | .98 |
| United Kingdom | 559.2 | 702.4 | .80 |
| Brazil | 202.4 | 323.6 | .63 |
| West Germany | 669.9 | 1,201.8 | .56 |
| Spain | 187.7 | 340.3 | .55 |
| Italy | 359.7 | 828.9 | .43 |
| Japan | 989.3 | 2,843.7 | .35 |
| France | 320.1 | 949.4 | .34 |
| a Estimates of GNP for centrally planned economies are subject to large margins of error. These estimates are as much 100 times larger than those from other sources that correct for availability of goods or use free-market exchange rates.  b The emissions/GNP is also likely to be underestimated for centrally planned economies.  Source: National Academy of Sciences, *Policy Implications of Global Warming* (Washington, D.C.: 1991). | | | |

## # 3 Increase of global surface temperature



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